Table of Contents

Introduction

The following use cases define the main success scenarios for identifying the fire suppression and preparedness resources for use within the FPU. The first use case is a summary of the detail use cases that follow. The use cases assume a single, shared process for all agencies. The Local Agency Fire Planner is the role played by the person responsible for fire planning within a local agency. Since the SuD may be used by multiple agencies, this role may be played by multiple persons within the FPU. The ability to extract fire resource data from ROSS (Resource Order and Status System) is a relatively new development in the requirements analysis. The impact of this approach is not fully known at this time. If the fire resource data is extracted from ROSS, it may still require modification by the Local Agency Fire Planner(s). The Resource table contained in the FPA System PM data model was derived from ROSS.

Summary Use Case

Use Case No: FPA01-03

Use Case Name: **Define Preparedness and Emergency Suppression Resources**

Brief Description: ***Define fire resource personnel, equipment and dispatch location for use within the FPU.***

Primary Actor: Local Agency Fire Planner
Preconditions: FPU and FMUs are defined.
Triggers: None identified

Main Success Scenario:

1. Local Agency Fire Planner(s) initiates the extract of fire resource data from ROSS and the SuD extracts the data.
2. Local Agency Fire Planner(s) review and update fire resource data.
3. Local Agency Fire Planner(s) define dispatch locations.

Alternate Flow of Events:

1a Fire resource data is defined by the Local Agency Fire Planner(s).

1a 1 Local Agency Fire Planner(s) define the resource category, kind and type for each fire resource and enter other attribute data.

1a 2 Local Agency Fire Planner(s) define ownership of each resource.

Policy Recommendations: None

Business Rules:

1. FPA will use standard fire line production rates as defined by NWCG.
2. When determining the optimal set of resources, the FPA model may deploy initial attack resources from the set of existing fire resources and can replicate fire resources to improve effectiveness.
3. The SuD can use standard production rates for fire resources rather than actual production rates because of the way a containment model contains a fire. We are not

growing the fire as it actually grew, but in a modeled fashion, which makes the use of standard production rates appropriate.

4. If there is an engine with a two person crew, there is no reload production rate required for the engine.

Assumptions:

- As part of the extract of the ROSS data, dispatch locations are defined.
- ROSS dispatch location data may not be at the level of detail required for the FPU**.**

Issues:

- If fire resource data is imported to the SuD from ROSS, will it contain NWCG standard production rates and personnel configurations?
- Does ROSS contain tactical data that may not adhere to the standards to be used for fire planning?
- What restrictions will there be on the extract and import of the ROSS data? How will the data be protected from changes by the user?

Terms: None

Metadata:

Source:	Requirements Analysis
Author:	Core Team
Date Created:	October 9, 2002
Level:	Business - Summary
Related Use Cases:	FPA01-00, FPA01-03-01, FPA01-03-02
Status:	Reviewed by Core Team
Last Update Date:	January 22, 2003

Detail Use Cases

Use Case No: FPA01-03-01

Use Case Name: **Define Fire Resources**

Brief Description: ***Define fire suppression resources.***
Primary Actor: Local Agency Fire Planner
Preconditions: FPU and FMUs must be defined.
Triggers: None identified

Main Success Scenario:
1. Local Agency Fire Planner(s) initiate the extract of fire resource from the ROSS database for one or more geographical areas based on the location of the FPU.
2. The SuD extracts the data and defines the fire resources data for the FPU.
3. Local Agency Fire Planner(s) review and update fire resource data.

Alternate Flow of Events:
1a Fire resource data is defined by the Local Agency Fire Planner(s).
- 1a 1 Local Agency Fire Planner(s) define the resource category, kind and type for each fire resource and enter other attribute data.
- 1a 2 Local Agency Fire Planner(s) define ownership of each resource.

Policy Recommendations:
- FPA will use the NWCG standards for staffing levels and production rates.
- FPA will use the NWCG standardized position descriptions.

Business Rules: None
Assumptions:
1. The predefined area-specific resource list is unconstrained by the FPU and is used to run the optimum effectiveness frontier.
2. The model can use non-existent resources, also known as replicated resources.
3. Loaned resources can be constrained.
4. ROSS data contains a catalog of resources that may not be currently available in the FPU.
5. ROSS contains the data for fire resources by category, kind and type and location.

Issues:
- Should an individual resource be identified in a way that relates to the actual fire resource; for example, engine 7133?
- How is ownership defined for replicated resources?

Terms: None
Metadata:

Source:	Requirements Analysis
Author:	Core Team
Date Created:	October 9, 2002
Level:	Business - Detail
Related Use Cases:	FPA01-03
Status:	Reviewed by Core Team

Last Update Date: January 22, 2003

Use Case No: FPA01-03-02

Use Case Name: **Define National Fire Resource Availability**

Brief Description: ***Define the national personnel and/or equipment that may be used for initial attack within the FPU.***

Primary Actor: Local Agency Fire Planner
Preconditions: FPU and FMUs must be defined.
Triggers: None identified

Main Success Scenario:

1. Local Agency Fire Planner(s) identify the personnel and equipment that are available per National Interagency Fire Suppression Agreement and other agreements or annual operating plans.
2. Local Agency Fire Planner(s) identify national fire resource availability for dispatch.

Policy Recommendations: None
Business Rules: None
Assumptions:

- The rules for availability of national resources will be established nationally.
- National fire resource data may be extracted from ROSS but the availability may be incorrect.

Issues: None
Terms: None
Metadata:

Source:	Requirements Analysis
Author:	Core Team
Date Created:	October 9, 2002
Level:	Business - Detail
Related Use Cases:	FPA01-03
Status:	Updated by M. Tae
Last Update Date:	January 16, 2003

Use Case No: FPA01-03-03

Use Case Name: **Define Dispatch Locations**

Brief Description: ***Define the dispatch locations for initial attack resources to be deployed.***

Primary Actor: Local Agency Fire Planner
Preconditions: FPU and FMUs must be defined.
Triggers: None identified.

Main Success Scenario:

1. Local Agency Fire Planner(s) initiate extract of dispatch location data from ROSS.
2. The SuD extracts the data and creates dispatch location data.
3. Local Agency Fire Planner(s) review and update dispatch location data.

Alternate Flow of Events:

1a Dispatch location data is entered by the Local Agency Fire Planner(s).
1a 1 Local Agency Fire Planner(s) define and describe the initial dispatch location.
1a 2 Local Agency Fire Planner(s) assign initial dispatch locations to fire resources.

Policy Recommendations: None
Business Rules:

- Initial dispatch locations can be outside the FPU.

Assumptions: None
Issues:

- What method will the SuD use to compute travel time by the fire resource from the dispatch location to the FMU travel point? Will it use a constant travel speed or contain more detail? If GIS data is available, the travel time from the resource to the fire could be computed based on the road location and conditions such as slope, etc.

Terms: None
Metadata:

Source:	Requirements Analysis
Author:	Core Team
Date Created:	January 5, 2003
Level:	Business - Detail
Related Use Cases:	FPA01-03
Status:	Reviewed by Core Team
Last Update Date:	January 22, 2003